

IN THE CLAIMS:

1-21. (Cancelled)

5 22. (Previously Presented) A method for receiving data on at least one receive antenna transmitted by a transmitter having a plurality of transmit antennas in a multiple antenna communication system, said method comprising the step of:

receiving an indication of a duration to defer until a subsequent transmission, said indication transmitted such that said indication is capable of being interpreted by a lower order receiver by diagonally loading a SIGNAL field across said plurality of transmit antennas; and
10 deferring for said indicated duration.

23. (Original) The method of claim 22, wherein said method is performed by a SISO receiver.

15 24. (Previously Presented) The method of claim 22, wherein said indication is transmitted in said SIGNAL field that complies with the 802.11 a/g standards.

25. (Cancelled)

20 26. (Previously Presented) A receiver in a multiple antenna communication system having at least one transmitter having a plurality of transmit antennas, comprising:

at least one receive antenna for receiving an indication of a duration to defer until a subsequent transmission, said indication transmitted such that said indication is capable of being interpreted by a lower order receiver by diagonally loading a SIGNAL field across said plurality of antennas; and
25 means for deferring for said indicated duration.

27. (Original) The receiver of claim 26, wherein said method is performed by a SISO receiver.

30 28. (Previously Presented) The receiver of claim 26, wherein said indication is transmitted in said SIGNAL field that complies with the 802.11 a/g standards.

29-41. (Cancelled)

42. (Previously Presented) The method of claim 22, wherein said duration is represented as a duration of said transmission.

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43. (Previously Presented) The method of claim 22, wherein said duration is represented as a length of said transmission.

44. (Previously Presented) The method of claim 22, wherein said SIGNAL field indicates a number of said antennas in said multiple antenna communication system.

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45. (Previously Presented) The method of claim 44, wherein said number of said antennas allows said multiple antenna communication system to be scalable.

46. (Previously Presented) The method of claim 44, wherein said number of said antennas allows a receiver to correlate channel coefficients with corresponding transmit antennas.

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47. (Previously Presented) The receiver of claim 26, wherein said duration is represented as a duration of said transmission.

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48. (Previously Presented) The receiver of claim 26, wherein said duration is represented as a length of said transmission.

49. (Previously Presented) The receiver of claim 26, wherein said SIGNAL field indicates a number of said antennas in said multiple antenna communication system.

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50. (Previously Presented) The receiver of claim 49, wherein said number of said antennas allows said multiple antenna communication system to be scalable.

51. (Previously Presented) The receiver of claim 49, wherein said number of said antennas allows said receiver to correlate channel coefficients with corresponding transmit antennas.

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52. (Previously Presented) A method for transmitting data by a transmitter having a plurality of transmit antennas in a multiple antenna communication system, said method comprising the step of:

determining an indication of a duration to defer until a subsequent transmission;

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transmitting said indication of said duration to defer until said subsequent transmission, said indication transmitted such that said indication is capable of being interpreted by a lower order receiver by diagonally loading a SIGNAL field across said plurality of transmit antennas.

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53. (Previously Presented) The method of claim 52, wherein said indication is transmitted in said SIGNAL field that complies with the 802.11 a/g standards.

54. (Previously Presented) The method of claim 52, wherein said duration is represented as a duration of said transmission.

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55. (Previously Presented) The method of claim 52, wherein said duration is represented as a length of said transmission.

56. (Previously Presented) The method of claim 52, wherein said SIGNAL field indicates a number of said antennas in said multiple antenna communication system.

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57. (Previously Presented) The method of claim 56, wherein said number of said antennas allows said multiple antenna communication system to be scalable.

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58. (Previously Presented) The method of claim 56, wherein said number of said antennas allows a receiver to correlate channel coefficients with corresponding transmit antennas.

59. (Previously Presented) A transmitter in a multiple antenna communication system, comprising:

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N transmit antennas for transmitting at least one training symbol using at least one

of said N transmit antennas and transmitting an indication of a duration to defer until a subsequent transmission, said indication transmitted such that said indication is capable of being interpreted by a lower order receiver by diagonally loading a SIGNAL field across said plurality of transmit antennas.

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60. (Previously Presented) The transmitter of claim 59, wherein said indication is transmitted in said SIGNAL field that complies with the 802.11 a/g standards.

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61. (Previously Presented) The transmitter of claim 59, wherein said duration is represented as a duration of said transmission.

62. (Previously Presented) The transmitter of claim 59, wherein said duration is represented as a length of said transmission.

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63. (Previously Presented) The transmitter of claim 59, wherein said SIGNAL field indicates a number of said antennas in said multiple antenna communication system.

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64. (Previously Presented) The transmitter of claim 63, wherein said number of said antennas allows said multiple antenna communication system to be scalable.

65. (Previously Presented) The transmitter of claim 63, wherein said number of said antennas allows a receiver to correlate channel coefficients with corresponding transmit antennas.